

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O.: Box: 1450... Alexandria, Virginia 22313-1450 www.uspto.gov

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

909

7590

06/17/2003

PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102 TRAN, TAM D

ART UNIT CLASS-SUBCLASS

345-168000

DATE MAILED: 06/17/2003

2676

- 1				Y	
ı	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	09/687,141	10/13/2000	. Boaz Arnon	PM 20598 38120	1036

TITLE OF INVENTION: DATA INPUT DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$650	\$0	\$650	09/17/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### **HOW TO REPLY TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

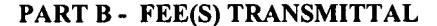
A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE



Commissioner for Patents Alexandria, Virginia 22313-1450 (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block I)

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7590

06/17/2003

PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102 Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

	transfinited to the USFTO, on the date marcated below.
(Depositor's name)	
(Signature)	
(Date)	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,141	10/13/2000	Boaz Arnon	PM 20598 38120	1036

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nonprovisional	YES	\$650	\$0	\$650	09/17/2003
EXAM	NER	ART UNIT	CLASS-SUBCLASS		
TRAN, TAM D 2676		345-168000			
1. Change of corresponde CFR 1.363).	nce address or indication of '	'Fee Address" (37	2. For printing on the patent from the names of up to 3 registered	patent attorneys	
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.			or agents OR, alternatively, (2) single firm (having as a mem	iber a registered	
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			attorney or agent) and the na- registered patent attorneys or ag is listed, no name will be printed	gents. If no name	

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

4a. The following fee(s) are enclosed:	4b. Payment of Fee(s)	4b. Payment of Fee(s):  A check in the amount of the fee(s) is enclosed.				
☐ Issue Fee	A check in the amount					
☐ Publication Fee	☐ Payment by credit of	ard. Form PTO-2038	is attached.			
□ Advance Order - # of Copies	☐ The Commissioner ☐ Deposit Account Num	The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).				
Commissioner for Patents is requested to apply the	Issue Fee and Publication Fee (if any) or to	re-apply any previo	usly paid issue fee to the application identific	ed above.		
(Authorized Signature)	(Date)					
NOTE; The Issue Fee and Publication Fee (if rother than the applicant; a registered attorney cointerest as shown by the records of the United States	or agent; or the assignee or other party i	ē n	•			
This collection of information is required by 37 obtain or retain a benefit by the public which is application. Confidentiality is governed by 35 U.S estimated to take 12 minutes to complete, includic completed application form to the USPTO. Time case. Any comments on the amount of time suggestions for reducing this burden, should be Patent and Trademark Office, U.S. Departm 22313-1450. DO NOT SEND FEES OR CONSEND TO: Commissioner for Patents, Alexandria	ing gathering, preparing, and submitting the will vary depending upon the individual you require to complete this form and/osent to the Chief Information Officer, U.S. ent of Commerce, Alexandria, Virgini IPLETED FORMS TO THIS ADDRESS	i l r				
Under the Paperwork Reduction Act of 1995, collection of information unless it displays a valid	no persons are required to respond to OMB control number.	a				



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APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,141	09/687,141 10/13/2000 Boaz Arnon		Boaz Arnon	PM 20598 38120	1036
909	909 7590 06/17/2003		EXAMINER		
PILLSBURY WINTHROP, LLP P.O. BOX 10500				TRAN, TA	AM D
MCLEAN, VA 22102				ART UNIT	PAPER NUMBER
				2676	14
$\cdot$				DATE MAILED: 06/17/2003	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 195 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 195 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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909	909 7590 06/17/2003			EXAMINER		
PILLSBURY WINTHROP, LLP P.O. BOX 10500				TRAN, TAM D		
MCLEAN, VA 22102				ART UNIT	PAPER NUMBER	
UNITED STATES				2676		
				DATE MAILED: 06/17/2003		

#### Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: <a href="http://www.uspto.gov/main/howtofees.htm">http://www.uspto.gov/main/howtofees.htm</a>.

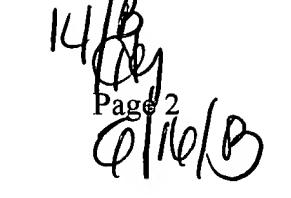
If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
•	09/687,141	ARNON, BOAZ
Notice of Allowability	Examiner	Art Unit
	Tam D. Tran	2676
	Talli D. ITali	2070
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate com GHTS. This application i	o in this application. If not included imunication will be mailed in due course. <b>THIS</b>
1.   This communication is responsive to papers received Marce	ch 24, 2003.	
2. The allowed claim(s) is/are 1-9,13,15-26 and 28-51.		
3. The drawings filed on 21 February 2003 are accepted by the		
<ul> <li>4.   Acknowledgment is made of a claim for foreign priority und</li> <li>a)   All b)   Some* c)   None of the:</li> </ul>	ler 35 U.S.C. § 119(a)-(d	) or (f).
<ol> <li>Certified copies of the priority documents have</li> </ol>		•
2. Certified copies of the priority documents have		
3. Copies of the certified copies of the priority do	cuments have been recei	ved in this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:  5. Acknowledgment is made of a claim for domestic priority ur	ndor 35 II S C & 110(a) /	to a provisional application)
(a) The translation of the foreign language provisional a	_ , , ,	·
6. Acknowledgment is made of a claim for domestic priority un		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the substitute of the comply and the substitute of the complex of the	this application. THIS TI	HREE-MONTH PERIOD IS NOT EXTENDABLE.
INFORMAL PATENT APPLICATION (PTO-152) which gives reas		
<ul> <li>8.  CORRECTED DRAWINGS must be submitted.</li> <li>(a)  including changes required by the Notice of Draftspers</li> <li>1)  hereto or 2)  to Paper No</li> </ul>	son's Patent Drawing Re	view ( PTO-948) attached
(b) including changes required by the proposed drawing of		• • • • • • • • • • • • • • • • • • • •
(c) including changes required by the attached Examiner	s Amendment / Commer	t or in the Office action of Paper No
Identifying indicia such as the application number (see 37 CFR 1. each sheet.	.84(c)) should be written o	n the drawings in the front (not the back) of
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T		
Attachment(s)		
<ul> <li>1 Notice of References Cited (PTO-892)</li> <li>3 Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5 Information Disclosure Statements (PTO-1449), Paper No</li> <li>7 Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4☐ Interv 6☐ Exam	e of Informal Patent Application (PTO-152) iew Summary (PTO-413), Paper No iner's Amendment/Comment iner's Statement of Reasons for Allowance

Application/Control Number: 09/687,141

Art Unit: 2676



#### **DETAILED ACTION**

#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Dale S. Lazar, Reg. No. 28872, on June 16, 2003.

2. IN THE CLAIMS:

In claim 1, lines 5, delete "a" and replace with -- an optical --.

## Allowable Subject Matter

- 3. Claims 1-9, 13, 15-26, 28-51 allowed.
- 4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art taken singly or in combination does not teach or suggest a data input device comprising: an optically generated image of a data input device, said image comprising at least one input zone actuable by an action performed thereon by a user; a sensor operative to sense the action performed on said at least one input zone, and to generate signals in response to said action, said sensor being a position sensing device(PSD), or an acoustic sensor, or non-visible light source sensor; and detecting light reflected from an object within silhouette of said image; and analyzing a reflection of said light to determine a spatial position of the object; a processor in communication with said sensor operative to process said signals for performing an operation associated with said at least one input zone.

Art Unit: 2676

The closest prior art shows an optically generated image of the input device but does not show sensor being a position sensing device (PSD), or an acoustic sensor, or non-visible light source sensor; and detecting light reflected from an object within silhouette of the image.

## Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tam D. Tran** whose telephone number is **703-305-4196**. The examiner can normally be reached on MON-FRI from 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 703-308-6829.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tam Tran

TT Examiner

Art unit 2676

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Marker C. Belle